

Evaluation Report for Category C, Subcategory 3.10, 3.15 Application

Application Number: 2008-3562
Application: Application to add a new tank-mix
Product: Warrior Insecticide
Registration Number: 26837
Active ingredients (a.i.): lambda-cyhalothrin
PMRA Document Number: 1724888

Background

Warrior Insecticide contains 122 g/L of the pyrethroid chemical lambda-cyhalothrin (Group 3) in an emulsifiable concentrate formulation. Lambda-cyhalothrin is a fast-acting contact and stomach poison that causes the death of the target insects by interference with the sodium channels in the nerve axon. Warrior Insecticide is registered for ground application only at the rate of 83 ml/ha on corn and 63-83 ml/ha on wheat, barley and oats, in 100-200 L/ha of water to ensure thorough coverage. A maximum of three applications may be made at 4-7 day intervals. Pre-harvest intervals are one day for sweet corn; 14 days for other types of corn and livestock foraging of wheat barley and oats; and 28 days for harvest of wheat barley and oats. Tank-mix with Quilt Fungicide (PCP # 28328) is registered on legume vegetables (Crop Group 6). Quilt is a premix formulation of Tilt 250E Fungicide (PCP#19346) and Quadris Flowable Fungicide (PCP#26153) and contains the Group 3 and 11 fungicides propiconazole and azoxystrobin respectively. Tank-mixes of Warrior Insecticide with Quadris Flowable Fungicide (PCP#26153) and Tilt 250E Fungicide (PCP#19346) are registered on all types of corn except popcorn.

Purpose of Application

A label amendment has been granted to permit the tank-mix application of Warrior Insecticide with Quilt Fungicide on wheat, barley, oats and corn, except popcorn. The label directs users to the labels of Warrior Insecticide and Quilt Fungicide for particular diseases and insects controlled; specific application instructions; and correct crop and pest stages. The label allows a maximum of two applications per season of this tank mix on corn at a 14-day interval; and a maximum of one application on all other cereal crops. As a rationale, Syngenta Crop Protection Canada, Inc states that the combination of several products in a tank mix reduces the total number of applications that a grower must apply, therefore reducing the amount of time and energy needed for pesticide application.

Chemistry, Health and Environmental Assessments

A chemistry assessment was not required since there was no change to product chemistry. Health and environmental assessments were not required since the use pattern, including host crops, application rates and timings, of the component products remained unchanged.

Value Assessment

Warrior Insecticide and Quilt Fungicide are registered on wheat, barley, oats and corn. The tank mixture of Warrior Insecticide and Quilt Fungicide is registered on legume vegetables, and therefore it is assumed that the products are physically compatible in a tank mixture, and that no reduction of efficacy of either product occurs as a result of tank-mixing. The tank mixtures of Matador Warrior with Quadris Flowable Fungicide and Tilt 250E Fungicide, which are the two components of Quilt Fungicide, are registered on all types of corn except popcorn. The application rates of both proposed tank mix partners are the same as the registered rates. Negative effects are not expected if the proposed tank mixes are applied to cereals.

Conclusion

From a value and sustainability perspective, the tank mix of Warrior Insecticide and Quilt Fungicide on wheat, barley, oats and corn, except popcorn, is acceptable.

References

- 1635993 2008, 10.2.3.1 - Rationale to support the tank mix application of MATADOR 120EC Insecticide or WARRIOR Insecticide with QUILT Fungicide on cereals (CG 15), DACO: 10.1,10.2.3.1,10.2.3.3,10.3.1,10.3.2

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